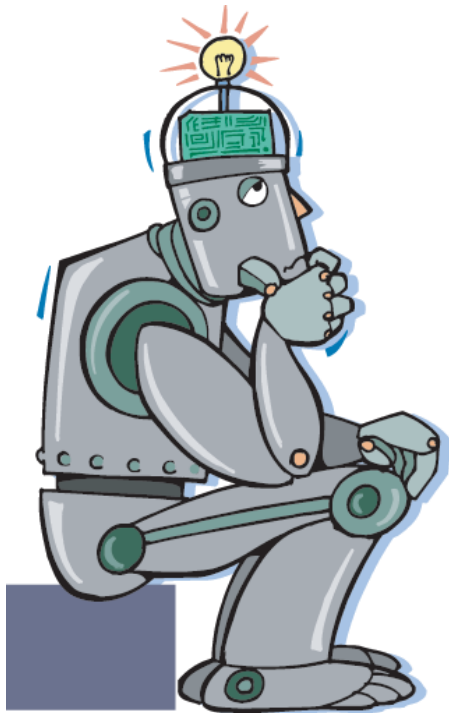


Robotics: Facts

Source: <http://idahoptv.org/sciencetrek/topics/robots/facts.cfm>

What do Robots do?



Imagine if your job was to tighten one screw on a toaster. And you did this over and over again on toaster after toaster, day after day, for weeks, months, or years. This kind of job is better done by robots than by humans. Most robots today are used to do [repetitive](#) actions or jobs considered too dangerous for humans. A robot is ideal for going into a building that has a possible bomb. Robots are also used in factories to build things like cars, candy bars, and electronics. Robots are now used in medicine, for military tactics, for finding objects underwater and to explore other planets. Robotic technology has helped people who have lost arms or legs. Robots are a great tool to help mankind.

So Why Use Robots?

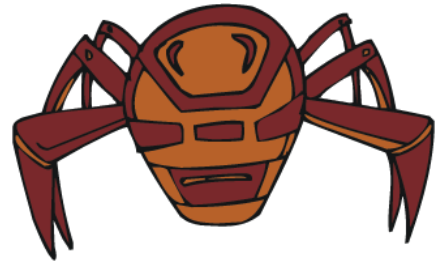
One reason robots are used is that it is often cheaper to use them over humans. Robots can explore inside gas tanks, inside volcanoes, travel the surface of Mars or other places too dangerous for humans to go.

Robots can also do the same thing over and over again without getting bored. They can drill, they can weld, they can paint, they can handle [hazardous materials](#), and in some situations, robots are much more accurate than a human - which can cut back on production costs, mistakes or hazards.

Robots never get sick, don't need sleep, don't need food, don't need to take a day off, and best of all they don't ever complain! There are a lot of benefits to using robots.

Nanorobots

[Nano-robots](#) or nanobots are robots scaled down to microscopic size in order to put them into very small spaces to perform a function. Currently nanobots are still in the developmental stage. Future nanobots could be placed in the blood stream to perform surgical procedures that are too delicate or too difficult for standard surgery. Nanobots could fight bacteria by tracking down and eliminating each bacterial cell or could repair individual organ cells in the body.



Imagine if a nanobot could target cancer cells and destroy them without touching healthy cells nearby. Nanobots would probably carry medication and surgical tools on board. They would need to be able to navigate through the human body and then find their way out too. Nanobots could be used in other situations too. Tiny nanobot gears and tools could allow construction of objects at the tiniest of scale. Some of the things we only imagine in science fiction could one day be reality. Maybe you will one day be a scientist who works with nanobots.

Artificial Intelligence



[Artificial intelligence](#) is also known as machine intelligence or AI for short. Some computers and robots have been given the opportunity to act with human-like behavior. Face recognition software, complicated scheduling software, or computer games that give players a response based on the players actions are all forms of artificial intelligence. The goal for AI was, at one time, to recreate the intelligence of a human being. At the present time, insect intelligence is the focus of research and development because insects and their behavior are easier to mimic. Nanobots could be based on insect behavior, working in swarms together to perform a function.